

111. *AYTHYA VALLISNERIA*. No. 100 ♂. Forks of Saskatchewan, May 15th, 1858.

112. *BUCEPHALA AMERICANA*. No. 67 ♂. Forks of Saskatchewan, April 12th, 1858.

113. *BUCEPHALA ALBEOLA*. No. 96. Forks of Saskatchewan, April 1858.

114. *MERGUS AMERICANUS*. No. 14 ♂. Forks of Saskatchewan, Oct. 20th, 1857.

No. 69 ♂. Forks of Saskatchewan, April 14th, 1858.

115. *LARUS ARGENTATUS*. No. 6 ♂. Hudson's Bay, Aug. 13th, 1857.

116. *LARUS DELAWARENSIS*. No. 12. Saskatchewan River, Sept. 28th, 1857.

117. *CHROICOCEPHALUS FRANKLINII*. No. 107. Saskatchewan Plains, May 16th, 1858.

118. *CHROICOCEPHALUS PHILADELPHIA*. No. 2 ♂. Hudson's Bay, Aug. 12th, 1857.

119. *HYDROCHELIDON PLUMBEA*. No. 135 ♀. Forks of Saskatchewan, June 2nd, 1858.

120. *PODICEPS CORNUTUS*. No. 88 ♀. Plains of Saskatchewan, May 3rd, 1858.

III.—*Descriptions of Six New Species of Birds from the Isthmus of Panama.* By Geo. N. LAWRENCE, C.M.Z.S., &c.

Fam. TURDIDÆ.

1. *HELEODYTES ALBO-BRUNNEUS*, sp. nov.

Male.—Head, neck, entire under plumage and under wing-coverts white; back, wings, and tail of a glossy umber-brown, tail rather lighter and narrowly crossed with darker nearly obsolete bars, the shafts of the central feathers whitish; thighs intermixed with light brown; under tail-coverts pale ochreous white with dusky stripes; upper mandible brownish horn-

colour, the under white at the base with the end dusky; irides brown; legs and feet dark brown.

Length 7 in.; wing $2\frac{1}{8}$; tail $2\frac{1}{4}$; bill $\frac{3}{4}$; tarsus 1.

This very distinctly coloured species was observed only at one locality, which was on the line of the Panama Railroad, near the summit of the Atlantic slope. Informit agrees with *H. griseus* (Sw.).

But few were seen, and no female obtained.

Fam. TYRANNIDÆ.

2. PITANGUS ALBOVITTATUS, sp. nov.

Male.—Crown and sides of the head blackish brown, crest gamboge-yellow; a broad band of white encircling the head, beginning at the bill and running over the eyes; upper plumage olive-green, quills and tail dark brown, the latter and the secondaries margined with pale-yellowish white; throat white, underplumage bright yellow; under wing-coverts and inner edges of quills pale yellow; bill black; irides brown; legs and feet black.

Length $6\frac{1}{8}$ in.; wing $3\frac{1}{4}$; tail $2\frac{5}{8}$; bill $\frac{5}{8}$; tarsi $\frac{5}{8}$.

This *Pitangus*, of which the sexes are alike, is of about the size of *P. lictor*, but its colours are different. The bill is shorter and stouter, being of the same form as in the larger species of this genus.

3. MYIOZETETES GRANADENSIS, sp. nov.

Male.—Upper plumage olive-green, with a concealed crest of bright orange-red; front, lores and superciliary stripe dull yellowish white; sides of the crown and occiput tinged with cinereous; wings and tail of a fine brown, edged with pale greenish yellow; throat greyish white with a slight tinge of yellow, underplumage bright deep yellow; bill black; irides light brown; legs and feet black.

The crest of the female is not quite so bright.

Length $6\frac{1}{2}$ in.; wing $3\frac{3}{8}$; tail $2\frac{7}{8}$; bill $\frac{1}{2}$; tarsi $\frac{1\frac{1}{6}}$.

In general colour this bird is much like *M. columbianus*, Cab. et Hein., but it differs in having the bill rather shorter and much broader at the base: the superciliary stripe is also quite indistinct; and it wants the pale-yellow tips of the wing-coverts, which exist in that species.

4. TODIROSTRUM OLIVACEUM.

Male.—Upper plumage olive-green; wings and tail blackish brown, the latter edged with olive-green; wing-coverts and quills margined with greenish yellow; under plumage pale yellow, with the throat olivaceous; under wing-coverts pale yellow; bill black, with the cutting-edges and base of the under mandible whitish; irides dirty white; legs and feet light brown.

The female differs only in being less olivaceous on the throat.

Length $3\frac{1}{2}$ in.; wing $1\frac{7}{8}$; tail $1\frac{9}{16}$; bill $\frac{1}{2}$; tarsi $\frac{5}{8}$.

This species has the same aberrant form of bill as *T. cinereigulare*, Sclater, the culmen being even more curved. As these two differ in this respect from the typical species, as suggested by Mr. Sclater (*Ibis* i. p. 444), it may be advisable to separate them*.

5. TYRANNISCUS PARVUS†, sp. nov.

Male.—Crown slaty-olive, a line of pale yellow from the bill over the eye; upper plumage deep olive-green; tail brown, edged with yellowish green, the under parts of the tail-feathers greyish with the shafts white; quills blackish-brown, and together with the wing-coverts edged with bright yellow; throat and breast ashy white, abdomen and under tail-coverts pale yellow, sides olivaceous; under wing-coverts pale yellow; bill dark horn-colour; irides white; legs and feet black.

Length 4 in.; wing $1\frac{7}{8}$; tail $1\frac{1}{2}$; tarsi $\frac{5}{8}$.

The female is like the male in plumage, but smaller, measuring in length only $3\frac{3}{8}$ inches.

6. TYRANNULUS BRUNNEICAPILLUS‡, sp. nov.

Male.—Head above of a fine dark brown, with a narrow whitish line from the bill over the eye; upper plumage olive-green; tail brownish olive, edged with olive-green; quills blackish brown, narrowly margined with greenish yellow; under plu-

* In the catalogue of my collection which I am now preparing, I have proposed the generic term *Oncostoma* for *Todirostrum cinereigulare*. Mr. Lawrence's bird forms a good second species of the genus.—P. L. S.

† This little bird is related to *Tyranniscus chrysops* (*Tyrannulus chrysops*, mihi, *Proc. Zool. Soc.* 1858, p. 10), but is apparently distinct.—P. L. S.

‡ A near ally of *T. semiflavus*, Scl. et Salv. (*Proc. Zool. Soc.* 1861, p. 300), from Guatemala, but differing in its brown head and larger bill.—P. L. S.

mage bright yellow, with an olive tinge on the neck ; under wing-coverts yellow ; bill black ; irides brown ; legs and feet black.

The female is similar to the male in size and plumage.

Length $3\frac{1}{8}$ in. ; wing $1\frac{3}{4}$; tail $1\frac{1}{8}$; tarsi $\frac{1}{2}$.

IV.—*Remarks on the Mode of preparing and keeping living Thrushes and other Birds intended for Shipment to Australia.*

By A. D. BARTLETT, Superintendent of the Zoological Society's Gardens, Regent's Park.

IN attempting to carry out this object, the greatest attention to the comfort and wants of the birds is essentially necessary to secure success.

They must be provided with sufficient good and suitable food, and with changes of food, and also with such cages as may best enable the persons who take charge of them to keep them clean and feed them with the least difficulty. By these means they may be preserved in good health during their captivity.

Before obtaining the birds, it is necessary to have a small room or aviary prepared for their reception, as follows:—Place in and about the room perches or bushes, especially in the corners, for the concealment of the wild birds ; have a fine net strained over the window, to prevent them striking against the glass. Let the floor be sprinkled with grit or coarse gravel. Throw about the floor fruit (apples or pears ; and if decayed, the better), chopped meat, bread-crumbs, worms, snails, &c. One or two shallow pans of water must be placed in the lightest parts of the room or aviary. One or two tame Thrushes, accustomed to the food, will be found a great advantage in the room. Everything thus ready, the birds cannot be too recently caught. They should be placed in the room as few hours after their capture as possible. Before turning them loose into the room, cut, with a pair of scissors, the first six feathers of the wings, and also the tail. Do not, however, cut them too short, so as to injure the hollow quills. The object in cutting the wings and tail is, first, that you prevent the birds dashing about and injuring themselves ; and secondly, they get tame sooner, and are ready to go into a small cage without getting the tail- and wing-